

REMARKS

By the present amendment, claims 1, 4, and 51 have been amended to clarify that the passive tag wirelessly receives the initial configuration data; claims 9, 12, 17, 20 and 52 have been amended to clarify that the step of transmitting the initial configuration information is performed wirelessly; claim 21 has been amended to incorporate the subject matter of claim 25 (and claim 25 accordingly cancelled and the dependency of claim 26 accordingly changed); claim 30 has been amended to incorporate the subject matter of claim 34 (and claim 34 accordingly cancelled and the dependency of claim 35 accordingly changed); claim 42 has been amended to incorporate the subject matter of claim 46 (and claim 46 accordingly cancelled and the dependency of claim 47 accordingly changed); and claims 2, 8, 10, 16, 19, 24, 41 and 50 have each been placed in an independent format. Upon entry of this amendment, claims 1-24, 26-33, 35-45, and 47-52 will be pending in the application.

Claim Rejections - 35 USC § 103

Claims 1-55 have been rejected as being obvious over U.S. Patent No. 6,177,860 to Cromer in combination with U.S. Patent No. 5,846,064 to Cowan. Claims 1-55 have also been rejected as being obvious over U.S. Patent No. 6,177,860 to Cromer in combination with U.S. Patent No. 6,064,649 to Johnston. Claims 1-55 have further been rejected as being obvious over U.S. Patent No. 6,177,860 to Cromer in combination with U.S. Patent No. 5,846,064 to Cowan or U.S. Patent No. 6,064,649 to Johnston, and further in view of U.S. Patent No. 5,539,394 to Cato.

Cromer is directed towards a method of loading an operating system and other control programs onto general purpose hardware computers to tailor each computer for an application such as text processing, graphic arts, scientific calculation, financial accounting, a teller work station, a bank officer work station, point of sale, process control, internet or other database access communication.¹ In Cromer, the electronic device 410 has an RFID module 411 mounted on the its circuit card 413 and wired to a connector 415. When the electronic device 410 is packed in a carton (as it will be received in a shipment from the manufacturer), the connector 415 is accessible through access flap 421 of the carton. In this manner, a hand-held RFID tag interrogator 419 can be wired to a connector plug 423, and the connector plug 423 mated with the connector 415 through the access flap 421. (See Figure 4, below.)

¹Cromer also notes that, "[i]n addition, each computer must be configured with characteristics unique to the operator or workstation to which the computer will be assigned" and that examples are "the users name, network configuration parameters, and the identity of the programs that will be needed in the workstation of each computer."

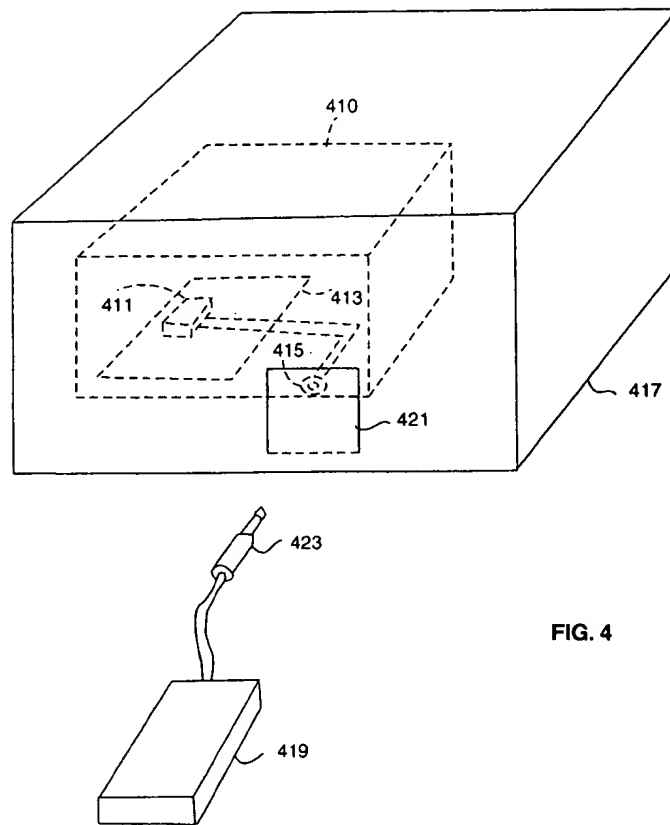


FIG. 4

When the still-packaged computer arrives at the customer company's receiving dock, the access flap 421 is opened, the plug 423 is connected to the connector 415, and a copy of the end user profile and the program image profile is written to the RFID module 411.²

²During this same RF access to the RFID module 411, address and hardware configuration data is also read.

When the computer arrives at its use location(e.g., the bank branch of a pretermained teller window) it is unpacked, connected to the LAN, printers etc. and plugged in to AC power. The workstation computer is then either powered up by the installer, the user or the server, and "woken up" for configuration and pre-loading. Upon request from the server, the computer reads the information in the RFID tag (stored on the receiving dock) and sends this information to the server. The server responds by sending software configuration data to the workstation. The necessary programs (e.g., operating system routines, device drivers, application programs and user data) are sent to and installed on the workstation computer being deployed. The server also writes network configuration information, for example IP Address, to the RFID tag.

Independent claims 1, 4, 34, and 51 now clarify that the passive tag wirelessly receives the initial configuration data and independent claims 9, 12, 17, 20, 21, 42 and 52 now clarify that the step of transmitting (or conveying) the initial configuration information is performed wirelessly. Now independent claims 2 and 10 set forth that the passive tag comprises an antenna for receiving a radio frequency (RF) signal. Cromer specifically teaches against any method requiring an antenna as it is "relatively expensive to manufacture and complex to assemble into the electronic device."³ Cromer boasts that "[t]hese problems of cost and complexity are reduced substantially by this invention which has the advantage that information needed to configure a computer for implementing a workstation is directly loaded onto an RFID chip memory by means of a more simple wire and plug connection made through an access flap in the carton of a fully packaged general purpose computer or other electronic device as it is being received at a receiving dock from a warehouse or a queue after final test without unpacking and applying power to the device."⁴ Whatever teachings the other references (Cowan, Johnston, and/or Cato) may or may not provide regarding wireless techniques, they do not overcome this shortcoming of the Cromer reference.

Regarding now independent claims 8, 16, 19, 24, 41 and 50, they set forth that the wireless communication device is non-operational (during receipt of the initial configuration information) by virtue of being unassembled, that the wireless communication device is unassembled during the transmitting and receiving steps, and/or that the conveying and storing steps are performed while the retrieved wireless communication device is not fully assembled. In contrast, in the Cromer method the transmitting, receiving, conveying, and storing are performed when the fully assembled (and still-packaged) computer arrives at the customer company's receiving dock. The other references (Cowan, Johnston, and/or Cato) also do not offer any suggestion that such steps could or should be performed before assembly of the Cromer computer.

³Cromer, column 1, line 56 through column 2, line 6.

⁴Cromer, column 2, lines 9 - 18.

Conclusion

In view of the foregoing, this application is now believed to be in a condition for allowance and an early action to that effect is earnestly solicited.

Respectfully submitted,

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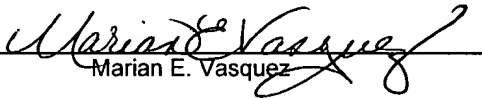
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Amendments to the Claims

1. (Currently amended) A wireless communication device destined for operation in a particular wireless network, comprising:

a transceiver for communicating in the wireless network;

a processor for controlling operations of the transceiver based on initial configuration information including network communication parameters corresponding to this particular wireless network;

a passive tag for wirelessly receiving the initial configuration information from an external source and storing the initial configuration information in a non-volatile memory at a time when the wireless communication device is otherwise in a non-operational mode; and

an interface for enabling the processor to access the initial configuration information stored in the memory when the wireless communication device is in an operational mode and thereby allowing operation in the wireless network by drawing upon the initial configuration information.

2. (Currently amended) A The wireless communication device of claim 1
destined for operation in a particular wireless network, comprising:

a transceiver for communicating in the wireless network;

a processor for controlling operations of the transceiver based on initial configuration information including network communication parameters corresponding to this particular wireless network;

a passive tag for wirelessly receiving the initial configuration information from an external source and storing the initial configuration information in a non-volatile memory at a time when the wireless communication device is otherwise in a non-operational mode; and

an interface for enabling the processor to access the initial configuration information stored in the memory when the wireless communication device is in an operational mode and thereby allowing operation in the wireless network by drawing upon the initial configuration information.

wherein the passive tag comprises an antenna for receiving a radio frequency (RF) signal with the initial configuration information modulated thereon, and a decoder/demodulator for demodulating the RF signal and decoding the initial configuration information therefrom.

3. (Original) The wireless communication device of claim 2, wherein the passive tag derives power from the RF signal and provides the derived power to the decoder/demodulator and the memory.

4. (Currently amended) A wireless communication device comprising:
a transceiver for communicating in a wireless network;
a processor for controlling operations of the transceiver based on initial configuration information;
a passive tag for wirelessly receiving the initial configuration information from an external source and storing the initial configuration information in a non-volatile memory at a time when the wireless communication device is otherwise in a non-operational mode; and
an interface for enabling the processor to access the initial configuration information stored in the memory when the wireless communication device is in an operational mode;
wherein the initial configuration information comprises at least one of a network address and a network identification for the wireless communication device.

5. (Original) The wireless communication device of claim 1, wherein the wireless communication device is a mobile terminal.

6. (Original) The wireless communication device of claim 1, wherein the wireless communication device is an access point.

7. (Original) The wireless communication device of claim 1, wherein the wireless communication device is non-operational by virtue of the processor being in a powered down state.

8. (Currently amended) A The wireless communication device of claim 1, destined for operation in a particular wireless network, comprising:
a transceiver for communicating in the wireless network;
a processor for controlling operations of the transceiver based on initial configuration information including network communication parameters corresponding to this particular wireless network;
a passive tag for wirelessly receiving the initial configuration information from an external source and storing the initial configuration information in a non-volatile memory

at a time when the wireless communication device is otherwise in a non-operational mode; and

an interface for enabling the processor to access the initial configuration information stored in the memory when the wireless communication device is in an operational mode and thereby allowing operation in the wireless network by drawing upon the initial configuration information.

wherein the wireless communication device is non-operational by virtue of being unassembled.

9. (Currently amended) A method for use in relation to a wireless communication device destined for operation in a particular network, the device including a transceiver for communicating in the wireless network, a processor for controlling operations of the transceiver based on initial configuration information including network communication parameters corresponding to this particular wireless network, and a passive tag, the method comprising the step of:

wirelessly transmitting the initial configuration information from a source external to the wireless communication device so as to be received by the passive tag and stored in a non-volatile memory within the passive tag while the wireless communication device is otherwise in a non-operational mode;

interfacing the processor with passive tag to access the initial configuration information stored in the memory when the wireless device is in an operational mode; and

operating in the wireless network by drawing upon the initial configuration information.

10. (Currently amended) A The method of claim 9, for use in relation to a wireless communication device destined for operation in a particular network, the device including a transceiver for communicating in the wireless network, a processor for controlling operations of the transceiver based on initial configuration information including network communication parameters corresponding to this particular wireless network, and a passive tag, the method comprising the step of:

transmitting the initial configuration information from a source external to the wireless communication device so as to be received by the passive tag and stored in a non-volatile memory within the passive tag while the wireless communication device is otherwise in a non-operational mode;

interfacing the processor with passive tag to access the initial configuration information stored in the memory when the wireless device is in an operational mode; and

operating in the wireless network by drawing upon the initial configuration information.

wherein the passive tag comprises an antenna for receiving a radio frequency (RF) signal transmitted during the transmitting step with the initial configuration information modulated thereon, and a decoder/demodulator for demodulating the RF signal and decoding the initial configuration information therefrom.

11. (Original) The method of claim 10, further comprising the step of the passive tag deriving power from the RF signal and providing the derived power to the decoder/demodulator and the memory.

12. (Currently amended) A method for use in relation to a wireless communication device including a transceiver for communicating in a wireless network, a processor for controlling operations of the transceiver based on initial configuration information, and a passive tag, the method comprising the step of:

wirelessly transmitting the initial configuration information from a source external to the wireless communication device so as to be received by the passive tag and stored in a non-volatile memory within the passive tag while the wireless communication device is otherwise in a non-operational mode;

wherein the initial configuration information comprises at least one of a network address and a network identification for the wireless communication device.

13. (Original) The method of claim 9, wherein the wireless communication device is a mobile terminal.

14. (Original) The method of claim 9, wherein the wireless communication device is an access point.

15. (Original) The method of claim 9, wherein the wireless communication device is non-operational by virtue of the processor being in a powered down state.

16. (Currently amended) A The method of claim 9, for use in relation to a wireless communication device destined for operation in a particular network, the device including a transceiver for communicating in the wireless network, a processor

for controlling operations of the transceiver based on initial configuration information including network communication parameters corresponding to this particular wireless network, and a passive tag, the method comprising the step of:

transmitting the initial configuration information from a source external to the wireless communication device so as to be received by the passive tag and stored in a non-volatile memory within the passive tag while the wireless communication device is otherwise in a non-operational mode;

interfacing the processor with passive tag to access the initial configuration information stored in the memory when the wireless device is in an operational mode;
and

operating in the wireless network by drawing upon the initial configuration information,

wherein the wireless communication device is non-operational by virtue of being unassembled.

17. (Currently amended) A method of initially configuring the wireless communication device of claim 1, said method comprising the steps of:

wirelessly transmitting the initial configuration information from a source external to the wireless communication device;

receiving the initial configuration information by the passive tag and storing the initial configuration information in the non-volatile memory;

accessing the initial configuration information stored in the memory; and
controlling operations of the transceiver based on the initial configuration information.

18. (Previously presented) A method as set forth in claim 17, wherein the processor is in a powered-down state during the transmitting and receiving steps.

19. (Currently amended) A method ~~as set forth in claim 17~~, of initially configuring the wireless communication device of claim 1, said method comprising the steps of:

transmitting the initial configuration information from a source external to the wireless communication device;

receiving the initial configuration information by the passive tag and storing the initial configuration information in the non-volatile memory;

accessing the initial configuration information stored in the memory; and

controlling operations of the transceiver based on the initial configuration information.

wherein the wireless communication device is unassembled during the transmitting and receiving steps.

20. (Currently amended) A method of initially configuring a wireless communication device, the device comprising a transceiver for communicating in a wireless network; a processor for controlling operations of the transceiver based on initial configuration information; a passive tag for receiving the initial configuration information from an external source and storing the initial configuration information in a non-volatile memory at a time when the wireless communication device is otherwise in a non-operational mode; and an interface for enabling the processor to access the initial configuration information stored in the memory when the wireless communication device is in an operational mode, said method comprising the steps of:

wirelessly transmitting the initial configuration information from a source external to the wireless communication device;

receiving the initial configuration information by the passive tag and storing the initial configuration information in the non-volatile memory;

accessing the initial configuration information stored in the memory; and

controlling operations of the transceiver based on the initial configuration information;

wherein said transmitting step comprises transmitting at least one of a network address and a network identification for the wireless communication device.

21. (Currently amended) A method of configuring and operating a wireless communication device for a particular wireless network, said method comprising:

manufacturing a plurality of wireless communication devices and storing them in an inventory, each of the devices having a transceiver for communicating in a wireless network, a processor, and a passive tag;

retrieving one of the wireless communication devices from the inventory when a request is received and the particular wireless network has been identified;

conveying initial configuration information to the passive tag of the retrieved wireless communication device, wherein the initial configuration information includes network communication parameters corresponding to said particular wireless network;

storing the conveyed initial configuration information in a non-volatile memory;

interfacing the processor of the retrieved wireless communication device with its passive tag to access the initial configuration information stored in the memory; and

controlling operation of the transceiver of the retrieved wireless communication device based upon the initial configuration information,
wherein the conveying step is performed wirelessly.

22. (Previously presented) A method as set forth in claim 21, wherein the conveying and storing steps are performed when the processor is in a non-operational mode.

23. (Previously presented) A method as set forth in claim 21, wherein the wireless communication devices stored in the inventory are each in packaging, and wherein the packaging is not removed to perform the conveying and storing steps.

24. (Currently amended) A method ~~as set forth in claim 21~~, of configuring and operating a wireless communication device for a particular wireless network, said method comprising:

manufacturing a plurality of wireless communication devices and storing them in an inventory, each of the devices having a transceiver for communicating in a wireless network, a processor, and a passive tag;

retrieving one of the wireless communication devices from the inventory when a request is received and the particular wireless network has been identified;

conveying initial configuration information to the passive tag of the retrieved wireless communication device, wherein the initial configuration information includes network communication parameters corresponding to said particular wireless network;

storing the conveyed initial configuration information in a non-volatile memory;

interfacing the processor of the retrieved wireless communication device with its passive tag to access the initial configuration information stored in the memory; and

controlling operation of the transceiver of the retrieved wireless communication device based upon the initial configuration information.

wherein the wireless communication devices stored in the inventory are not fully assembled, and wherein the conveying and storing steps are performed while the retrieved wireless communication device is not fully assembled.

25. (Cancelled)

26. (Currently amended) A method as set forth in claim 21 25, wherein conveying step is wirelessly performed by conveying a radio frequency (RF) signal with the initial configuration information modulated thereon to the passive tag, demodulating the RF signal, and decoding the initial configuration information therefrom.

27. (Previously presented) A method as set forth in claim 26, wherein the conveying step further comprises deriving power from the RF signal and providing the derived power to the decoder/demodulator and the memory.

28. (Previously presented) A method as set forth in claim 21, wherein the initial configuration information comprises a serial number, network identification, network address, passwords, encryption keys, and/or RF configuration data.

29. (Previously presented) A method as set forth in claim 21, wherein the communication parameters comprise a network address and/or a network identifier.

30. (Currently amended) A wireless communication device destined for operation in a particular wireless network, comprising:
a transceiver for communicating in the wireless network;
a processor for controlling operations of the transceiver;
a passive tag for receiving the initial configuration information from an external source and storing the initial configuration information in a non-volatile memory at a time when the wireless communication device is otherwise in a non-operational mode, wherein the initial configuration comprises information necessary to locate and communicate with a certain server in order to download certain software therefrom; and
an interface for enabling the processor to access the initial configuration information stored in the memory when the wireless communication device is in an operational mode;

wherein the processor is programmed to locate and communicate with the server via the initial configuration information and to direct downloading of said software from the server, thereby allowing operation in the wireless network by drawing upon the downloaded software,

wherein the passive tag wirelessly receives the initial configuration information.

31. (Previously presented) A wireless communication device as set forth in claim 30, wherein the server is an FTP server.

32. (Previously presented) A wireless communication device as set forth in claim 31, wherein the FTP server is part of the destined-for wireless network.

33. (Previously presented) A wireless communication device as set forth in claim 31, wherein the FTP server is controlled by the manufacturer of the wireless communication devices.

34. (Cancelled)

35. (Currently amended) A wireless communication device as set forth in claim ~~30~~ 34, wherein the passive tag comprises an antenna for receiving a radio frequency (RF) signal with the initial configuration information modulated thereon and a decoder/demodulator for demodulating the RF signal and decoding the initial configuration information therefrom.

36. (Previously presented) A wireless communication device as set forth in claim 35, wherein the passive tag derives power from the RF signal and provides the derived power to the decoder/demodulator and the memory.

37. (Previously presented) A wireless communication device as set forth in claim 30, wherein the software package includes network communication parameters corresponding to said particular wireless network.

38. (Previously presented) A wireless communication device as set forth in claim 30, wherein the wireless communication device is a mobile terminal.

39. (Previously presented) A wireless communication device as set forth in claim 31, wherein the wireless communication device is an access point.

40. (Previously presented) A wireless communication device as set forth in claim 31, wherein the wireless communication device is non-operational by virtue of the processor being in a powered-down state.

41. (Currently amended) A wireless communication device ~~as set forth in claim 31~~, destined for operation in a particular wireless network, comprising:
a transceiver for communicating in the wireless network;
a processor for controlling operations of the transceiver;
a passive tag for receiving the initial configuration information from an external source and storing the initial configuration information in a non-volatile memory at a time when the wireless communication device is otherwise in a non-operational mode,
wherein the initial configuration comprises information necessary to locate and communicate with a certain server in order to download certain software therefrom; and
an interface for enabling the processor to access the initial configuration information stored in the memory when the wireless communication device is in an operational mode;

wherein the processor is programmed to locate and communicate with the server via the initial configuration information and to direct downloading of said software from the server, thereby allowing operation in the wireless network by drawing upon the downloaded software.

wherein the wireless communication device is non-operational by virtue of being unassembled.

42. (Currently amended) A method of configuring and operating a wireless communication device in a particular wireless network, said method comprising:

- manufacturing a plurality of wireless communication devices and storing them in an inventory, each of the devices having a transceiver for communicating in a wireless network, a processor, and a passive tag;
- retrieving one of the wireless communication devices from the inventory when a request is received and the particular wireless network has been determined;
- conveying initial configuration information to the passive tag of the retrieved wireless communication device, wherein the initial configuration information includes data necessary to locate and communicate with a selected server;
- storing the conveyed initial configuration information in a non-volatile memory,
- interfacing the processor of the retrieved wireless communication device with its passive tag to access the initial configuration information stored in the memory so that the processor can locate the selected server;
- communicating with the server, via the processor, and downloading a software package to the processor; and
- controlling operation of the transceiver of the retrieved wireless communication device based upon the downloaded package,

wherein the conveying step is performed wirelessly.

43. (Previously presented) A method as set forth in claim 42, wherein the server is an FTP server.

44. (Previously presented) A method as set forth in claim 43, wherein the FTP server is on said particular wireless network.

45. (Previously presented) A method as set forth in claim 43, wherein the FTP server is controlled by the manufacturer of the wireless communication devices.

46. (Cancelled)

47. (Currently amended) A method as set forth in claim 42 46, wherein the conveying step is wirelessly performed by conveying a radio frequency (RF) signal with the initial configuration information modulated thereon to the passive tag, demodulating the RF signal, and decoding the initial configuration information therefrom.

48. (Previously presented) A method as set forth in claim 47, wherein the conveying step further comprises deriving power from the RF signal and providing the derived power to the decoder/demodulator and the memory.

49. (Previously presented) A method as set forth in claim 42, wherein the wireless communication devices stored in the inventory are each in packaging, and wherein the packaging is not removed to perform the conveying and storing steps.

50. (Currently amended) A method ~~as set forth in claim 42~~, of configuring and operating a wireless communication device in a particular wireless network, said method comprising:

manufacturing a plurality of wireless communication devices and storing them in an inventory, each of the devices having a transceiver for communicating in a wireless network, a processor, and a passive tag;

retrieving one of the wireless communication devices from the inventory when a request is received and the particular wireless network has been determined;

conveying initial configuration information to the passive tag of the retrieved wireless communication device, wherein the initial configuration information includes data necessary to locate and communicate with a selected server;

storing the conveyed initial configuration information in a non-volatile memory,

interfacing the processor of the retrieved wireless communication device with its passive tag to access the initial configuration information stored in the memory so that the processor can locate the selected server;

communicating with the server, via the processor, and downloading a software package to the processor; and

controlling operation of the transceiver of the retrieved wireless communication device based upon the downloaded package,

wherein the wireless communication devices stored in the inventory are not fully assembled, and wherein the conveying and storing steps are performed while the retrieved wireless communication device is not fully assembled.

51. (Currently amended) A wireless communication device, destined for operation in a particular wireless network, comprising:

a transceiver for communicating in the wireless network;
a processor for controlling operations of the transceiver based upon communication parameters corresponding to the particular wireless network;
a passive tag for wirelessly receiving the initial configuration information from an external source and storing the initial configuration information in a non-volatile memory at a time when the wireless communication device is otherwise in a non-operational mode; and
an interface for enabling the processor to access the initial configuration information stored in the memory when the wireless communication device is in an operational mode and thereby allowing operation in the wireless network by drawing upon the initial configuration information;
wherein the initial configuration information comprises the network communication parameters or information allowing downloading of software containing the network communication parameters.

52. (Currently amended) A method of configuring and operating a wireless communication device in a particular wireless network, said method comprising:
manufacturing a plurality of wireless communication devices and storing them in an inventory, each of the devices having a transceiver for communicating in a wireless network, a processor, and a passive tag;
retrieving one of the wireless communication devices from the inventory when a request is received and the particular wireless network has been determined;
wirelessly conveying initial configuration information to the passive tag of the retrieved wireless communication device;
storing the conveyed initial configuration information in a non-volatile memory;
interfacing the processor of the retrieved wireless communication device with its passive tag to wirelessly convey the initial configuration information stored in the memory to the processor;
determining network communication parameters from this initial configuration information; and
controlling operation of the transceiver of the retrieved wireless communication device based upon the network communication parameters.

53. (Previously presented) A method as set forth in claim 52, wherein the initial configuration information includes the network communication parameters.

54. (Previously presented) A method as set forth in claim 52, wherein the initial configuration information comprises information allowing downloading of software containing the network communication parameters, and wherein the determining step comprises downloading the software to the processor.

55. (Previously presented) A method as set forth in claim 54, wherein the initial configuration information allows the processor to locate a selected server and communicate therewith, wherein the software is available on such selected server, and wherein said downloading step comprises transmitting the software from the server to the processor.
